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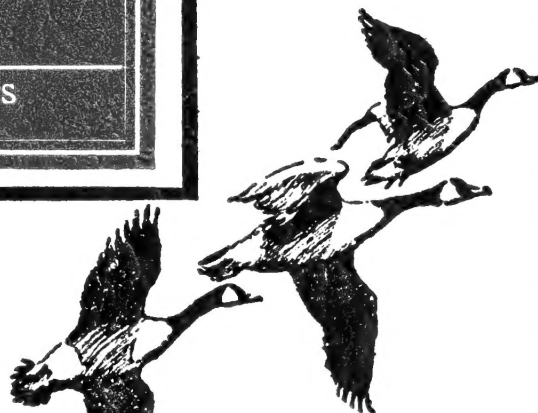


MAR 30 1950

U.S. Department of Agriculture

*TO YOU WHO HAVE TAKEN TO  
HUNTING & FISHING:*

GAME FOOD NURSERIES  
OSHKOSH, WISCONSIN, U.S.A.







# *You Can Enjoy*

BETTER HUNTING and FISHING

Thousands  
of Wild Ducks

Will

Come to the  
Waters Where  
Their Natural  
Foods Grow

Game Fish  
Reproduce  
Faster and  
Grow Larger  
In Waters  
Having a  
Proper Aquatic  
Plant Growth



## "All together—Heave"

"THIS world has never known a country equal to ours in size, having greater natural beauty or conformation, diversity of scenery and wealth of animal and plant life.

"Only as a day in the evolution of the world is 300 years, and after this length of time, *we, today*, are called upon to answer for our stewardship of plethora of riches and beauties. We have handled these natural wonders, this profusion of riches in a spirit of insane recklessness.

"Today we are squarely facing the problem of reparation for we must make reparation or we must meet disaster. There is no question of whether we will or not, we must as a matter of protection.



Sportsmen have responded exceeding well to the urge (above) as written by the late Gene Stratton Porter. Many depleted water areas have been replaced and other new grounds inundated. Migratory waterfowl are again on the increase. Hunting and fishing grounds are being developed daily. Do your part now to perpetuate these great sports. The following pages will be most helpful to you.



"We must save every brook and stream and lake.

"We must save the natural resources which remain to us.

"If we desire comfort, food and beauty for ourselves and any sort of a heritage at all to bequeath to our children each of us must lend a hand. Those of us who see the vision and most keenly feel the need must furnish the motive power for those less responsive.

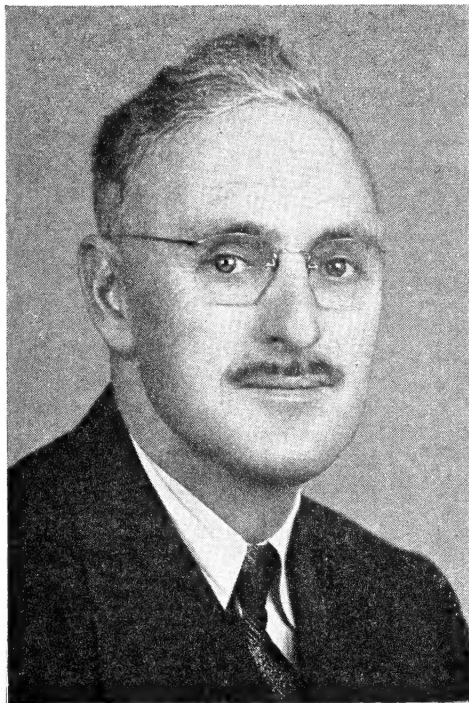
"It is time for all of us to get together and in unison make a test of our strength.

"One man could not do this work nor could two or three but working in unison for the same purpose many men could do it.

"All together—Heave."

GAME FOOD NURSERIES

OSHKOSH, WISCONSIN, U.S.A.



This is Wm. "Bill" Coon, the originator and owner of Game Food Nurseries. We feel our patrons wish to know the man with whom they deal.

## INTRODUCTION

For over a quarter of a century, Mr. Coon has pioneered the field of aquatic biology, specializing in the development of better feeding and breeding grounds for migratory waterfowl, fish, muskrats and other game.

From a little backyard biological supply business, he has grown to be the world's largest dealer in natural foods for wild game. Shipments are sent to all parts of the world, serving more than 25,000 customers.

Continuous travel over remote areas in all parts of this continent enables Mr. Coon, with his knowledge of Nature and the habits of her creatures, to give to his patrons (without cost or obligation) through mail personal help with their game food problems.

Both Mr. Coon and his staff of helpers are constantly striving to extend useful service and quality planting materials to their patrons.



*GAME FOOD NURSERIES*  
*OSHKOSH, WISCONSIN*





### WILD DUCKS MUST EAT

When Wild Ducks stop on your waters and find little or no food, they go on their way in search of better feeding grounds, but if they find plenty of their natural foods growing there, you can't keep them away.

To have the best of Hunting or Fishing all that is necessary is to start a growth of their favorite foods. Provide cover and give them a chance, they will do the rest. Soon you will have game or fish in abundance.

### GOOD PLANTING MATERIALS IMPORTANT

Aquatic seeds, tubers and plants are of a perishable nature and must be carefully handled by experienced people. Poor materials are a waste of time and money, no matter how inexpensive they may be.



### PIONEER AQUATIC NURSERYMEN

We are the first and oldest of game food nurseries. Mr. Coon, the owner of this firm, is one of the originators of this business with wider field experience than any other expert in the field.

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### GROWN TO SUIT YOUR CLIMATE

Our planting materials are grown on properties from the far north to the extreme south to meet all conditions and climates. These seeds, tubers and plants are produced on twelve different properties located in various parts of the United States.



During our years of specializing in the development of more attractive feeding and breeding grounds for waterfowl, fish and game, we have studied the habits and haunts of wild life. We have examined the contents of thousands of stomachs to determine their principal foods, and studied the propagation of these natural foods.

On the following pages it tells what, where, when and how to plant these natural foods. How to improve your hunting on waters or in the field. How to increase your sport with rod and reel.

### GAME FOOD NURSERIES

*Oshkosh, Wisconsin,*





# *Improve* your **DUCK HUNTING** *and Fishing*



## **NATURAL FOODS**

Should be Planted Now!

## **GAME FOOD NURSERIES**

OSHKOSH, WISCONSIN, U. S. A.

### **AQUATIC PLANTS ARE PERMANENT**

Once you have a growth of aquatic plants established in those waters they will be permanent, reproducing for years to follow. The various kinds of aquatic plant life reproduce in different ways, by seeds, running roots and tubers.

### **DO NOT FEAR CHOKING WATERS**

Most aquatic plants only grow in certain depths of waters. Those that will thrive in deeper waters grow submerged, the tops being several feet below the water's surface.

### **SPRING PLANTING PRODUCES RESULTS THIS YEAR**

During spring is the ideal time to plant aquatic vegetation. It starts immediate growth and you will reap the benefit by next fall in more wild ducks and better shooting. Same is true of the aquatic plant life for game fish, a spring planting will aid the small fish produced this same year.

### **\$9.00 PLANTS AN ACRE**

The average cost of sufficient materials to start an acre of aquatic plants is about Nine Dollars. Some kinds cost more and others less. However the first cost is the only cost, for they are perennials. It is not necessary or advisable to plant your entire water area, just start a growth in the desired place and it will spread in its proper water depth.

# WILD RICE

## TO LURE THE MARSH DUCKS

Mallards, Pintails, Blackducks, Teal, Widgeon and Canada Geese fly hundreds and hundreds of miles to the Wild Rice Marshes. During Fall they find the ripened grains in great abundance, also shelter and hiding places among the tall growth. If there are several Wild Rice Marshes in the vicinity, great numbers of these waterfowl will be seen passing from one marsh to the other. In the north only the freezing water will drive them out. Farther south they will stay on these good feeding grounds throughout the entire winter. Wild Rice is also very important as a Muskrat food.

A field of Wild Rice once established makes a permanent feeding ground, for Wild Rice reseeds itself from year to year.

### WHERE TO PLANT

The best places for planting wild rice are in fresh water streams, sloughs, marshy lakes or ponds, having an outlet, soft mud bottom and waters from 6 inches to 3½ feet in depth. In sunny sheltered bays or coves on larger lakes, streams or rivers where it is protected from waves or strong currents are excellent places to plant.

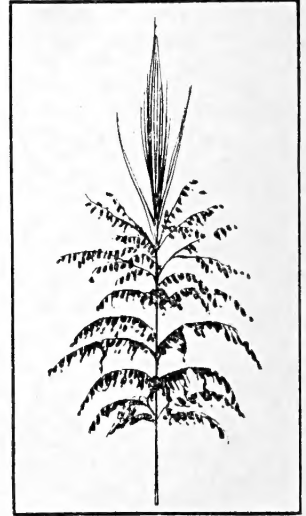
Near the seacoast wild rice will thrive in streams where the waters are not salty to taste and where the tide is not over four feet. Tame rice fields that depend on tides for their water supply are usually

very good places for growing wild rice, or in old abandoned rice fields.

Wild Rice is easy to grow. It does very well in Canada and the northern states. It has proven a success in southern waters where conditions were ideal.

### PLACES NOT SUITABLE

Years of experience has taught us that Wild Rice does not do well in landlocked ponds (those having no outlet) waters salty to taste, strongly alkaline or on white marl bottom soil. Such places as along the Mississippi River and its tributaries where the water rises and stays ten feet or more above the low water mark for several weeks during spring are also unsatisfactory. If conditions such as described exist in your waters then we suggest the planting of other duck foods which are suited to such places, find them described on the following pages.



Wild Rice Head  
(*Zizania Aquatica*)

## WHEN TO PLANT

In Southern waters Wild Rice Seed may be planted from January to June. In the North as soon as the waters are free from ice during spring. We suggest planting as early as possible to give it full advantage of the entire growing season so that the expected results may be obtained by fall, fully matured plants, lots of feed and plenty of ducks. Good seed is important, we supply only the best, hardy Giant Wild Rice Seed, guaranteed to grow.



A Wild Rice Bed 45 Days After Planting

## HOW TO PLANT

Wild Rice seed is very easily planted, all that is necessary is to broadcast the seed on the waters ranging in depth from 6 inches to 3½ feet. Plant where there is a fairly rich bottom soil, scattering about one handful of seed to each two or three square yards. The seed will immediately sink to bottom and within a short time will bury itself in the bottom soil. We urge you to plant early as possible for in late spring the seed is inclined to sprout which makes it necessary to mix the seed with mud in order to sink it to bottom. Sprouted seed will float on the waters and is more bothersome to plant.

Our supply of wild rice seed is very limited, therefore, we suggest that you place your order early and be sure of your supply. We will store your seed until you wish shipment. Complete planting instructions are sent with each order. Twenty-five pounds will plant an acre.

## GIANT WILD RICE SEED

Price \$0.90 per pound, quantities of 10 pounds or more. \$0.95 per pound quantities less than 10 pounds. Young Wild Rice Plants \$16.00 per 1000.

# WILD CELERY

## BRINGS THE DIVING DUCKS

Canvas-backs, Redheads, Bluebills, etc., darken the sky over the wild celery beds. A few years ago it was no trick at all to go out and get the limit of those big old Canvas-backs and Redheads, neither is it today where the Wild Celery beds abound. But, many of the vast Wild Celery beds of former years have disappeared; drainage, pollution and other causes have destroyed many and many an acre of them. We must utilize every lake, pond and stream to prolong this sport.

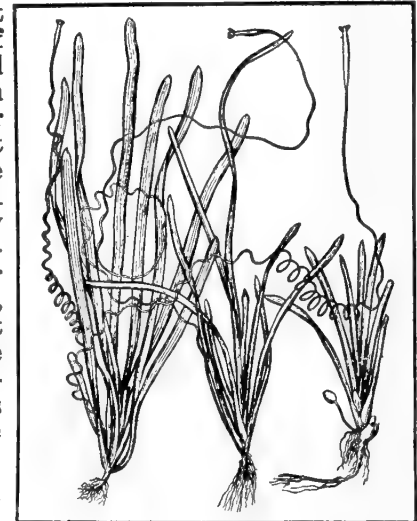
You will find no better way to increase your enjoyment during your hours of recreation than shooting these leery old divers. Thousands of them can be attracted to your local waters by establishing a growth of Wild Celery.

All parts of the plant are eaten by the Wild Ducks, but the tender winterbuds and rootstocks are relished most. Once the Wild Celery is established in your waters it will grow there permanently. There is no danger of the ducks destroying the growth for there are many tubers which break off remaining in the mud and many plants are never molested which will produce the following year. All kinds of wild ducks like wild celery.

## IMPORTANT FOR FISH

Wild Celery being a submerged water plant is also important as a food and cover plant for fish.

The plants support countless numbers of minute insect and animal life which fish depend upon for food. Fish also eat portions of the plants themselves. A bed of Wild Celery will keep your waters pure and clear and well oxygenated, which is important for fish life. The plants provide shelter and hiding places for young fish, where they can escape from their enemies, assuring many more of them reaching maturity. Wild Celery is an excellent winter food for Muskrats.



Wild Celery (*Vallisneria Spiralis*)

## WHAT AND WHEN TO PLANT

The Wild Celery propagates in three ways, by seed, runners and winterbuds, a sort of tuber. It is by planting these winterbuds (tubers) during the months of April, May and June that one can establish a quick and very good growth of Wild Celery in their waters. Results may be noticed by the following fall.

## WHERE TO PLANT

Wild Celery grows best in waters from 2 to 10 feet in depth preferably on a mud bottom, although it will grow on sandy loam or clay. It requires fairly fresh waters, that is waters which are not real salty or strong alkaline.

## HOW TO PLANT

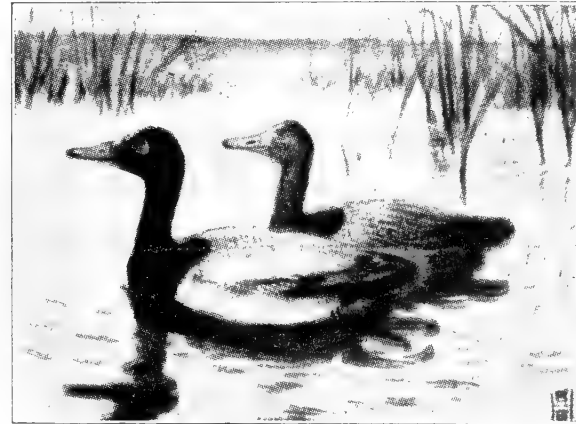
The simplest and best way to plant Wild Celery is with 8 penny nails and No. 8 rubber bands. Just loop the small rubber several times over the nail head to take up the tension, next slip 3 of the tubers under rubber, they are then ready to plant. After a quantity has been made take them to the desired planting place and drop one by one into the waters about 3 to 6 feet apart. We furnish more complete planting instructions with each order.

**One Thousand Tubers plant one Acre.**

**Price \$18.00 per 1,000; \$2.50 per 100 Tubers.**

**Prepared for Planting with Nails**

**Price \$24.00 per 1000; \$3.50 per 100 Tubers.**



**Canvas-back (Aristonetta Vallisneria)**

**Southern Grown Wild Celery Plants**

**Price \$30.00 per 1000 Plants; \$4.00 per 100 Plants.**

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Good hunting or good fishing is no longer a gift of the gods. The plain and simple fact is that you find hunting and fishing where there is sound and constructive food and cover propagation work being done.

# SAGO PONDWEED

## BEST ALL ROUND DUCK FOOD

Early in the season the Sago Pondweed will attract Mallards and Teal, later the Canvas-backs and other divers. It's the most important of water plants for both wild ducks and fish. All species of wild ducks feed upon its roots, tubers and seeds which are produced in abundance. In fact all parts of the plant are eaten by the wild ducks, but they cannot destroy the growth for it has a very strong root system which makes a net work thru the bottom soils. Many roots and tubers remain unmolested to produce a growth the following year. One planting will make a permanent growth. Sago Pondweed produces more food for the Wild Ducks than any other aquatic plant. It is also an important food plant for the Muskrats.

## EXCELLENT FOR FISH

Like the Wild Celery the Sago Pondweed also provides food, cover and protection for the fish. It purifies and clarifies the waters, takes up the poisonous gases and puts forth oxygen into the waters. Various kinds of insect life deposit their larva on these plants which is food for the small fish. The Sago Pondweed plants shade and cool the under waters and will not only improve the fishing but also the quality of the fish.

## WHAT AND WHEN TO PLANT

The tubers of Sago Pondweed should be planted during April, May and June. They will produce food for the Wild Ducks the following Fall. These plants have a very strong root system and are indestructible by Carp.

## Government Indorsement

U. S. Department of Agriculture Bulletin No. 634 says that Sago Pondweed is probably the most important single waterfowl food plant on the continent and is responsible for about half, or more, of the total food percentage credited to the genus *Potamogeton*.



Sago Pondweed (*Potamogeton Pectinatus*)

## WHERE TO PLANT

These plants are very hardy and will grow in almost any waters except salt waters. On practically every kind of bottom soil except gravel. They are submerged plants and do best in waters from 2 to 6 feet in depth, altho Sago Pondweed will grow in water from 1 to 10 feet in depth. When possible plant where there is some mud.

## HOW TO PLANT

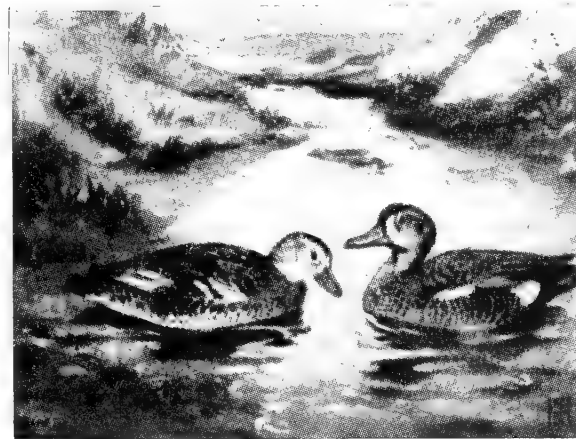
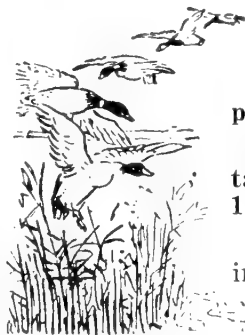
The tubers are planted in the same manner as Wild Celery tubers (see how to plant on page 9). Complete planting instructions are furnished.

One Thousand Tubers will  
plant an Acre.

Price \$30 per 1,000 tubers, \$3.50  
per 100.

Ready to plant with weights attached, \$36.00 per 1000—\$4.50 per 100.

The quantity of food that grows in any waters governs the number of wild ducks that can stay there as well as the length of their visit.



Blue-Winged Teal (Querquedula Discors)

## Ducks Are Effective In Mosquito Control

Mallard ducks are efficient as a mosquito control agency, Texas Game Department biologists say. They eliminate most of the larvae of the insect, even from the most badly infected places.—From the National Wildlife Federation.

## WAMPEE—DUCK CORN

A good Wild Duck Coaxer. Southern or Northern grown. Marsh ducks are particularly fond of the Wampee Seeds which shell off the stock in late fall like kernels of corn shelled from the cob. It will help hold the Mallards and other shallow water feeders after many other foods are gone.

### WHEN AND WHERE TO PLANT

Wampee Duck Corn Seed may be planted during fall or spring. They grow in wet marshy boggy places or on fairly rich mud bottom in waters from 1 inch to 1 foot in depth. Plant them at the waters edge of any lake, pond or stream.

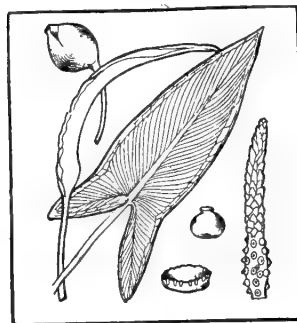
### HOW TO PLANT

Wampee Seed may be planted by mixing same with a good sticky clay and scattering small parts of the mixture here and there in the shallow waters. If it is your desire to plant this seed in a wet marshy place, simply lift the soil with a hoe, drop in several

seeds and step the soil together closing the hole. We will furnish complete planting instructions with order. Ten pounds of seed will plant an Acre.

### WAMPEE DUCK CORN SEED

Price \$.95 per pound.



Wampee  
(*Peltandra Virginica*)

Natural Foods are the secret of attracting large numbers of waterfowl, fish or game and holding them over an extended period. Make a liberal planting now.



# WILD (JAP) MILLET

(*Echinochloa Crusgalli*)

## ATTRACTS THE SHALLOW WATER DUCKS

Also known as Goose Grass. Ranks almost as high as Wild Rice as a good Duck Coaxer in localities where Wild Rice cannot be grown. Wild Millet grows to be 4 to 6 feet high and makes very good blinds as well as producing a large seed head with an abundance of food for the Wild Ducks.

## SMARTWEED

(*Polygonum Pensylvanicum*)

A popular food with the Mallards. On the lowlands where Smartweed grows, from Canada to the Gulf, Mallards will surely stop during their fall flight. They are particularly fond of feeding upon Smartweed in places which overflow in fall, where they may dibble the seeds from the mud in shallow waters.

## WHEN AND WHERE TO PLANT

Seeds of both Wild Millet and Smartweed may be planted any time of year.

The Wild Millet and Smartweed grow under similar conditions on damp lowlands and mud flats. They have proven very good along the Illinois and Mississippi Rivers, also on old Rice fields and in such places as can be flooded during the duck season. They do best on a fairly rich soil.

## HOW TO PLANT

It is well to break the soil where possible. One may use a drag, disc or grub hoe. Then sow the seed broadcast, after which drag or rake the planted area so as to cover the seed.

On a wet, sticky soil one may simply broadcast the seed with good results, no need to work such soil.

Forty pounds will plant one acre.

Wild (Jap) Millet Seed,  
Price \$17.50 per 100 lbs.;  
per pound, 20c.

Smartweed Seed, Price  
\$30 per 100 lbs.; per pound,  
35c.

Fifty pounds at 100 rate.



Wild Millet  
Seed Head

# WATER SMARTWEED

(Polygonum Amphibium)

Wild Ducks like the seeds of Water Smartweed, particularly Mallards, Blacks, Pintail and Teal. They have to work hard to find the meaty black seeds in the soils and helps to hold these ducks on your waters.

## WHEN AND WHERE TO PLANT

Water Smartweed may be planted from January through December. It will grow in wet soils or shallow waters, preferably on a mud bottom soil. Due to it being very hardy it will grow in either northern or southern climate. Waters that are fresh, moderately acid or mildly alkaline are ideal.

## HOW TO PLANT

The Water Smartweed reproduces by both seeds and roots. Seeds being difficult to store and preserve the germination of, we therefore recommend the planting of root sections, for quick and good

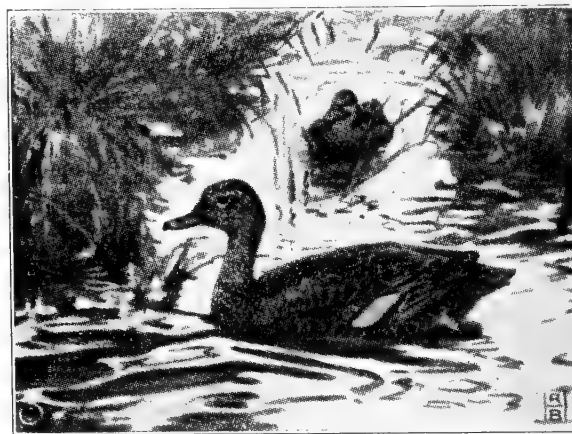
results. Just wade along the waters' edge and push the root sections into the soil in very shallow waters. They will take hold promptly.

## PRICE

1,000 Roots ..... \$25.00

100 Roots ..... 3.00

Ready to plant with weights attached  
\$30 per 1000 — \$4 per 100



Black Duck (Anas Rubripes)

# HARD STEM BULRUSH

(*Scirpus acutus*)

The Hard Stem Bulrush is excellent for Wild Ducks, it provides food and cover. It is the most important of Round Stem Bulrushes as a wild duck food. Also ideal for borders of fish ponds, providing good cover for game fish. Muskrat not only feed upon its roots, but also build their houses of its stems.

This species of bulrush is very hardy, it will grow in either wet soils or shallow waters to three feet in depth. It thrives in either a sandy soil or a rich mud bottom, from the Gulf of Mexico to Hudson Bay. Either fresh, acid, alkaline or brackish waters are suitable.

Due to the stout stem and sturdy root system, the Hard Stem Bulrush will break wave action, thus preventing erosion. Wild ducks love to huddle among the tall growth because of the quiet waters it commands. Here they find food as well as protection from raw weather on cool Fall mornings, feasting upon the many seeds that it produces.

The root stocks of the Hard Stem Bulrush can be planted during Fall or Spring. Southern orders will come direct from our Southern nurseries, for Northern waters we will ship from Wisconsin.

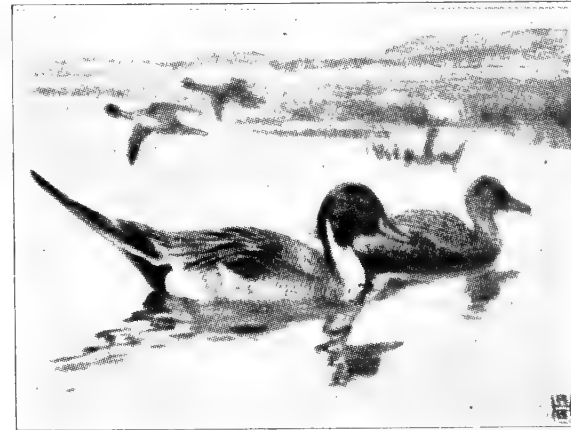
To plant the Hard Stem Bulrush simply set the root stocks in wet soils or shallow waters. They

will send out running roots which will multiply and reproduce. They are indestructible by carp due to the fibrous roots. Two hundred fifty rootstocks will start a quarter acre bed.

## PRICE

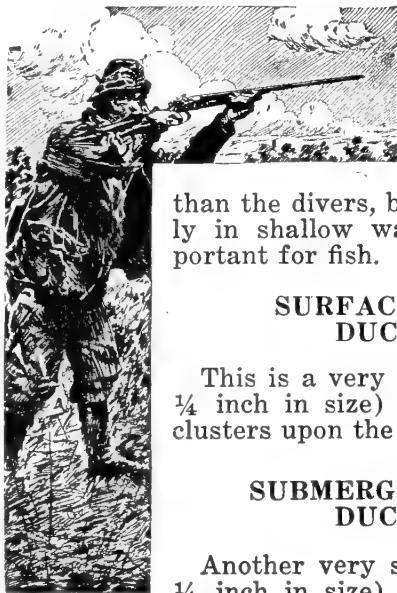
### Hard Stem Bulrush Rootstocks

\$5.00 per 100, \$10.00 per 250, \$40.00 per 1,000 rootstocks.



Pintail or Sprig (*Dafila Acuta Izitzihoa*)

# DUCKSMEAT OR DUCKWEEDS



All kinds of Wild Ducks feed upon the Ducksmeat. The shallow water feeders make up a larger percentage of their food of this plant

than the divers, because it grows largely in shallow waters. It is also important for fish.

## SURFACE FLOATING DUCKSMEAT

This is a very small plant (less than  $\frac{1}{4}$  inch in size) which floats in great clusters upon the surface of the waters.

## SUBMERGED FLOATING DUCKSMEAT

Another very small plant (less than  $\frac{1}{4}$  inch in size) which floats in great masses, submerged near the bottom.



## WHAT, WHEN AND WHERE TO PLANT

The above plants grow under very similar conditions and are transplanted in the same manner during the months of June to October. These plants should be transplanted into fresh waters from 1 to 6 feet in depth on any kind of bottom in ponds or quiet sheltered bays and coves. The above plants are indestructible by Carp.

## HOW TO PLANT

Just drop a handful of plants into the waters about every two feet.

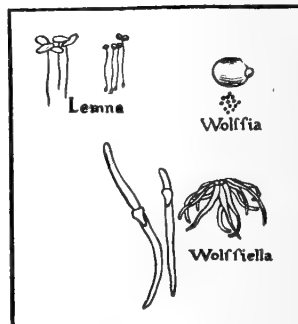
Five bushels of plants to the acre.

### Surface Ducksmeat

Price, \$4.00 per bushel plants. \$3.75 per bushel 10 bu. lots.

### Submerged Ducksmeat

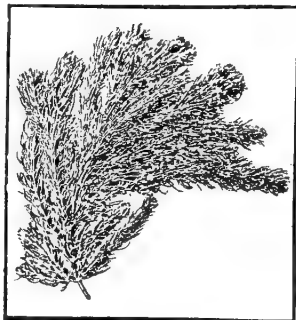
Price \$4 per bushel plants.



Ducksmeat

## COONTAIL PLANTS

Seeds of the Coontail Plant are eaten by many species of Wild Ducks, they also feed upon the foliage. This plant provides both food and cover for fish. It's a rapid growing plant and makes considerable food in a short time.



Coontail  
(*Ceratophyllum Demersum*)



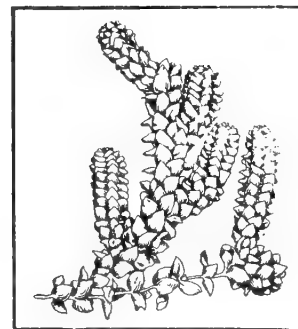
### WHAT, WHEN AND WHERE TO PLANT

Planting of these two kinds can be made from April to October. They grow best on a mud bottom in one to five feet of water, preferably in small ponds, sloughs or quiet bays on larger lakes. Just lay a handful of plants on the waters and push them into the bottom soils with a paddle.

**PRICE**     \$4.00 per bushel plants.  
                 \$3.75 per bushel in 10 bushel lots.

## ELODEA

The Elodea is of value as a food plant for marsh ducks. It has a great value as a food and cover plant for fish. It is also a very good water purifier. Like the Coontail it grows very rapidly. Once growing in those waters it will be permanent.



Elodea  
(*Anacharis Canadensis*)

# DEEP WATER DUCK POTATO

(*Sagittaria Rigida*)

Another favorite food for all kinds of Wild Ducks. The diving ducks feed on it during fall in the deeper waters. Shoal water ducks eat it if the waters are low during fall. It is a rapid grower and produces abundantly of food. It has numerous acorn like tubers on its roots just beneath the bottom soils which the Wild Ducks glut themselves with. One can hardly drive the ducks away from a good bed of Deep Water Duck Potatoes and if they

do leave it is only temporary, they soon return for more.

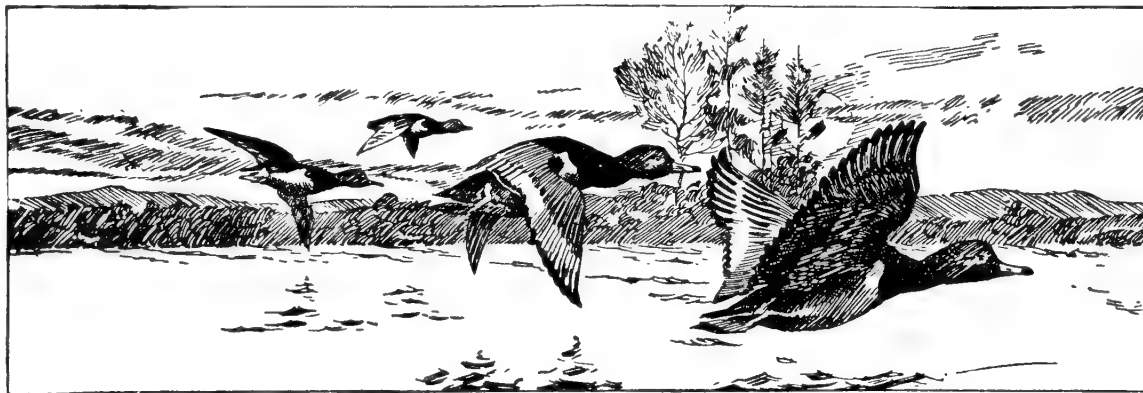
Plant the tubers during spring or fall in from one to five feet of water. A soft mud bottom is best and will produce a luxuriant growth next duck season. They are very hardy and will thrive in any fresh water lake, pond or stream. Changing water levels do not affect the growth of these Duck Potato plants.

In planting deep water duck potatoes just fasten the tuber to an eight penny nail with a small rubber band and drop them in the waters in the desired place. One thousand tubers plant one acre.

## PRICE

Deep Water  
Duck Potato tub-  
ers \$30.00 per  
1000; \$4.00 per  
100.

Ready to plant  
with weights at-  
tached, \$36.00 per  
1000; \$5.00 per  
100.



Southern grown Deep Water Duck Potato Roots @ \$50.00 per 1000 roots.

# WATERLILIES

## AMERICAN LOTUS

Wild ducks eat the young and tender seeds as they drop from the pods. It also is of value as a food and cover plant for game fish. Muskrats will feed upon the banana-like tubers it produces. American Lotus is very ornamental having large cream-colored flowers. The seed may be planted during any season.

## WHITE WATERLILY

Seed of the White Waterlily are often consumed by wild ducks, however, they do not produce abundantly of seed. It is considered as an excellent food and cover plant for game fish. Muskrats will feed upon the roots.

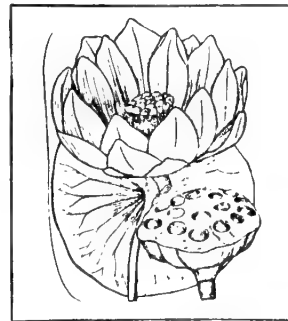
White Waterlilies are sweet-scented and very ornamental, and will add to the beauty of the waters. Tubers or rootstocks of White Waterlilies are planted during Fall, Spring or Summer.

All waterlilies do best on a mud bottom in waters from 1 to 4 feet in depth.

## HOW TO PLANT

Tubers and rootstocks are very easily planted. Cut a fairly straight stick about 5 feet in length which is between 1 and 2 inches in thickness. Whittle off one side at end to make a flat surface, then drive two nails into this flat surface on a slant to make a sort of crotch. Place a tuber into this crotch and push it into the mud about 3 or 4 inches. Plant these about 3 feet apart. These tubers are usually planted from a boat. Seed are simply broadcast.

Seven hundred tubers will plant one acre.



**Lotus Waterlily**  
(*Nelumbo Lutea*)

## PRICES

White Waterlily Tubers \$6  
per 100; White Waterlily  
Rootstocks \$12 per 100;  
American Lotus Seed \$1.00  
per pound.

# WAPATO DUCK POTATO

## RAPID GROWING DUCK COAXER

The Wapato Duck Potato is a very good all around Wild Duck Food. Canada Geese and Swan are also very fond of this plant. The species of Wild Ducks which will feed upon Wapato depends largely upon the water conditions under which it grows. If the waters remain nearly the same level the year around, Mallards and other shallow water ducks will feed upon the tender shoots, tubers and seeds which it produces. In places where there is an overflow or the water deepens during fall and winter, Canvas-backs and other divers will feed upon Wapato.

As a Muskrat food the Wapato is considered among those of the most importance and is often called Rat Potato.

## WHAT AND WHEN TO PLANT

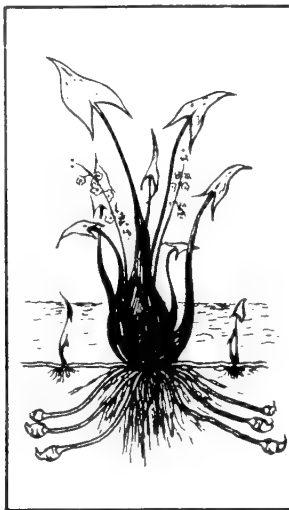
Wapato propagates largely by tubers which should be planted during April, May and June. Tubers planted in spring will produce fully matured plants the following fall.

## WHERE TO PLANT

This plant is very hardy and will grow well in most any inland waters excepting those which are very strong of alkali or salts. It does the best in a fairly rich soil on damp lowlands, mud flats or in water from 1 inch to 1 foot in depth.

## HOW TO PLANT

The tubers of the Wapato Duck Potato are very easily planted, all that is necessary is to step into your boots or waders and take a quantity of tubers to the place you wish to plant. Then push each tuber about one or two inches deep into the bottom soil, planting about three feet apart. More complete planting instructions sent with order. One thousand tubers plant one acre.



Duck Potato  
(*Sagittaria Latifolia*)

Price, \$22.50 per 1,000 tubers; \$2.50 per 100.



## IT'S A FACT

There are but three fundamentals that concern wildlife of every kind, they are: **To Find Food, Protection From Enemies and To Reproduce.** Make your place attractive and you will enjoy plenty of game and lots of sport.

### A TRUE FISHERMAN

The **American Forest Life** gives us this:

"Doin' any good?" asked Jim Gilgore, looking over the rail of the bridge.

"Any good?" answered the fisherman below. "Why, I caught 40 bass out o' here yesterday."

"Say, do you know who I am?" asked the man on the bridge.

The fisherman replied that he did not.

"Well, I'm the fish and game warden."

"Say," asked the fisherman, "do you know who I am?"

"No," replied the officer.

"Well, I'm the biggest liar in the country."

## UNITED STATES GOVERNMENT INDORSES THESE DUCK FOODS

Technical Bulletin No. 634 published in March, 1939, called *Food of Game Ducks in the United States and Canada*, now on sale at 40c each by the Superintendent of Documents at Washington, D. C., lists these various foods, described in this book, tells of their value and propagation, and illustrates many of them. It's a worthy publication to every wild-fowler.



## FROGBIT

(*Limnobiium Spongia*)

Wild Ducks feed upon its seeds and tender shoots. It being a floating plant makes excellent cover for game fish. Frogbit is a typical southern plant and thrives in either sunny or shaded areas. It floats upon the surface of fresh water ponds or sloughs sending out runners with plants forming every few inches. The plants are easily planted, just drop them here and there in the waters where they cannot float away. Plant from March to December, using 500 plants to the acre bed.

### PRICE

100 plants .....	\$ 6.00
1000 plants .....	40.00

### PREDICT—GOOD DUCK CROP

Favorable weather conditions over the past year in the great Canadian wild duck factory will give us a larger crop of wild ducks. The national organization of wild fowlers, Ducks Unlimited, Inc., contributed liberally in its most successful work of upholding the supply even though the number of hunters have increased materially. With continued favorable weather plus good work of re-establishing more breeding and feeding grounds, all will enjoy better duck shooting next Fall.

WM. O. COON, Naturalist.

## BANANA WATERLILY

(*Castalia flava*)

An important wild duck food for Southern waters. It grows best in shallow water of a warm climate, preferably those having a rich bottom soil or a good deposit of silt. Either shaded or sunny water areas are suitable. Start several small beds by dropping the small plants with hibernating buds in protected coves during spring or summer months.

### PRICE

Banana Waterlily Buds \$75.00 per 1,000  
or \$10.00 per 100.



Redhead (*Nyroca Americana*)

## WATER SHIELD

Sometimes called *Brasenia* is an important wild duck food. Only during the last few years have we been able to grow sufficient quantities to supply the demand and thus list it in our literature. Wild Ducks like the tender shoots and hibernating buds of the Water Shield as well as its seeds. It has a very strong root system almost indestructible by carp. Water Shield grows from the far north to the extreme south. It grows best in waters from one foot to five feet in depth on a mud bottom. Fresh waters, lakes or ponds are most suitable for its growth.

Water Shield has small round leaves, like pond lilies (about 2 inches across) and make wonderful cover for game fish. Roots are planted from February through November. One thousand Roots will plant an acre.

### PRICE

Water Shield Roots \$4.50 per 100.

Water Shield Roots \$35.00 per 1000.

Complete planting instructions sent with each order.

## REDHEAD GRASS

(*Potamogeton Perfoliatus*)

Diving Ducks eat the brittle roots of this important Wild Duck Food. Shallow water Ducks feed on its wheat-like seeds at the waters surface. It is very hardy, grows in from one to six feet of water on either soft or firm bottom. Easily planted. Plant roots during spring months, seed during fall.

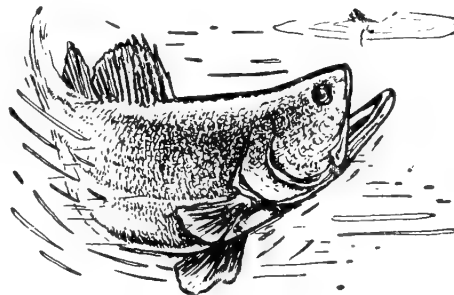
Redhead Grass is also valuable as a food and cover plant for game fish. Such as Blue Gills, Perch and Crappie always linger in the Redhead beds.

1000 roots plants one acre.

### PRICE

Redhead Grass Roots \$45.00 per 1000 or \$7.00 per 100.

“ “ Seed \$1.50 per pound.



## NAIAS—Bushy Pondweed

The Naias or Bushy Pondweed is an important wild duck food, all parts of the plant are eaten by them. It grows in waters ranging in depth from 1 foot to 6 feet, on either sand, clay or mud bottom. Naias is a strictly fresh water plant. It grows entirely submerged, seldom ever exceeding one foot in height and makes a sort of soft green carpet of moss over the bottom.



Naias

This plant is considered very important as a food, cover and oxygenating plant for game fish. It also helps clarify the water.

Plants containing seed should be planted during August to November. They are easily planted by mixing them with clay and broadcasting into the water. Four bushels plant an acre.

### PRICE

Naias with seeds \$7.00 per bu.

## SWEET FLAG—WATER IRIS

Both the Sweet Flag and Water Iris are important food and cover plants for Muskrats. They are also important cover for waterfowl and provide excellent

nesting places. Roots may be planted during spring or fall in wet low lands or marshy places.

1000 Roots \$25.00; 100 Roots \$3.00.

## WATER CRESS

The Water Cress is used largely by breeders of Wild Ducks, who consider it very valuable as a food plant for their Duck Farms. It grows very rapidly.

### WHEN, WHERE AND HOW TO PLANT

Water Cress may be started by transplanting plants during spring or fall. It grows in cool waters, usually where there is a slight current, like in springs, brooks, small streams or shallow ponds. In transplanting plants simply set them out by hand in shallow waters.

Water Cress Plants \$5.00  
per 100.



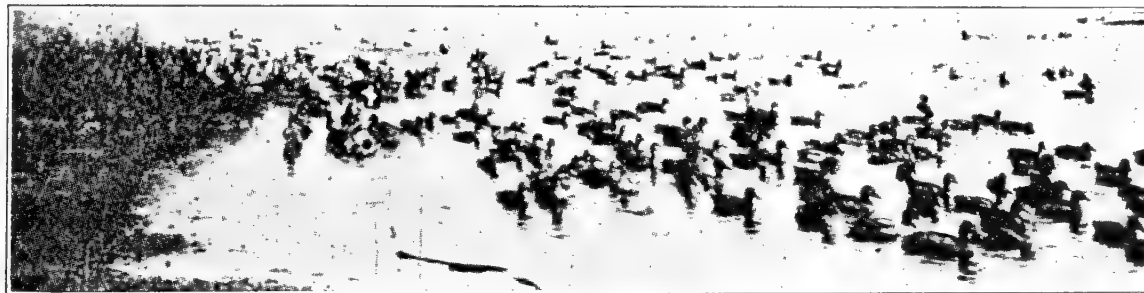
Water Cress

## PICKEREL PLANT

(*Pontederia Cordata*)

A good natural wild duck food, also important as a cover plant for game fish, very beautiful and most hardy. Seeds of the Pickerel Plant which are produced quite abundantly are eagerly sought by the wild ducks. Pickerel Plant is distinct in its spike of bright blue flowers and its lance-shaped or heart-shaped leaves with round bases, it resembles both the Wampee Duck Corn and Wapato Duck Potato. It grows best in mucky soil in shallow ponds, streams and marshes of fresh or slightly brackish waters. Root stock can be planted from March through November with very good results, 500 roots will plant one acre. Easily planted, just set the roots in the soils in shallow waters. Southern and northern grown varieties.

Price 100 Pickerel Plants, \$14; 500 Pickerel Plants, \$60.



## THREE-SQUARE RUSH

(*Scirpus Americanus*)

Of about 150 different rushes belonging to the *Scirpus* family, the Three-Square Rush is the most important wild duck food. It produces a sizable cluster of meaty seeds which the shallow water ducks are very fond of. It also makes good blinds for the hunter. Three-Square Rush gets its name from the three-sided or triangle-shaped stock.

The Three-Square Rush grows well on sandy soils on lake margins or along streams. It grows in marshes and firm rich soils as well as sand. Just wet soils at the water's edge are ideal, or in waters to one foot in depth, never deeper. It grows in either fresh water areas or in brackish or moderately alkaline places. In ordering specify for salt or fresh waters.

Seeds of the Three Square Rush may be planted during the fall months and tubers or roots during the spring. Complete planting instructions furnished.

Price,  
Three Square  
Rush

Seeds  
\$1.50 per pound  
Tubers  
\$ 4.00 per 100  
\$18.00 per 500  
\$35.00 per 1000

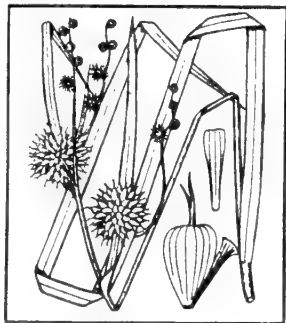
## COVER PLANTS

### BURREED

Is a valuable plant to have growing in your marsh. Seeds which resemble kernels of corn, shell from the large prickly burr during fall and are eagerly eaten by Marsh Ducks.

Burreed grows from 3 to 5 feet in height and during early summer makes ideal nesting places for the Wild Ducks, also provides blinds for the hunter during fall.

As a muskrat food, the Burreed is one of the three most important. Its young shoots and runners are tender and numerous.



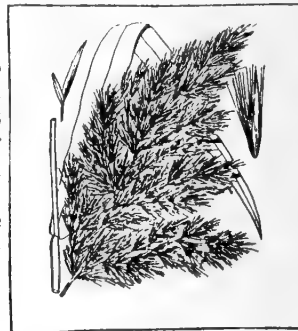
Burreed Seed Head

### CATTAILS

Cattails are hardy plants for wet soils and shallow waters. They offer excellent cover for wild ducks and protection for other aquatic plants. These plants grow to be 5 to 7 feet high and make good blinds. Cattail Plants are very important as food and cover plants for muskrats, being tender and high in starch contents which helps produce a glossy coat.

### REEDGRASS

Makes the very best blinds for hunters. It grows from 5 to 8 feet with numerous long narrow leaves, during late fall in the North, Wild Ducks will seek shelter from the cold winds among the Reedgrass. It is also of importance for the Muskrat.



Reedgrass (Phragmites)

### WHERE AND HOW TO PLANT

The Burreed, Cattail and Reedgrass grow best on a fairly rich soil either on wet lowlands or in waters from 1 to 18 inches in depth. The roots of these plants should be transplanted during May thru November.

Slip on your boots, take a spade or digging shovel and a quantity of roots to the place you are going to plant. In the shallow waters about three feet apart, take up a shovel full of soil and place 1 root in each hole, then replace the soil and press it firmly into place with your boot.

### PRICE

Burreed Roots .....	\$30.00 per 1000, \$4.00 per 100.
Cattail Roots .....	\$32.50 per 1000, \$4.00 per 100.
Reedgrass Roots .....	\$32.50 per 1000, \$4.00 per 100.
Burreed Seed	\$1.00 per lb.; Cattail Seed \$5.00 per lb.

## MUSKGRASS

A few bushels of Muskgrass planted during spring, late summer or fall will produce an excellent feeding place for the Wild Ducks the following season. They feed upon the foliage as well as the many small tubers which are produced. Both Marsh Ducks and Diving Ducks feed upon Muskgrass. One will also increase the sport with rod and reel, for Muskgrass is a valuable food and cover plant for fish.



Muskgrass

Broadcast bits of the plants containing (oogonia) seed spores upon the waters anytime from April to December. Muskgrass grows in fresh or alkaline waters from 2 to 12 feet in depth on almost any kind of bottom. One requirement is that the waters contain some lime which will be indicated by shells or shell bearing creatures such as snails or clams in the waters. Four Bushels will plant an Acre.

### PRICE

Muskgrass Seed Spores

\$4.00 per bushel.

## CORD GRASS

A very hardy and prolific plant for the prevention of erosion. Set the Cord Grass Roots out along the bank or the edge of earth dam where wave action is most destructive. It makes a network of fibrous roots and also makes excellent cover for wild ducks, its foliage reaching about 3 feet in height. Plant during spring or fall.

PRICE: \$ 4.50 per 100 Roots

\$35.00 per 1,000 Roots



Shoveler or Spoonbill (*Spatula Clypeata*)

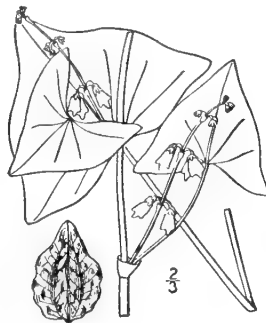
## DUCK WHEAT

Duck Wheat is a very rapid growing plant. It produces an abundance of seed which Wild Ducks and Geese are fond of. Most favorable results are obtained when seed is planted in June or July on places which go dry or can be drained during summer and flooded during the duck season.

### HOW TO PLANT

Break the soil, with a plow, disc or drag, then broadcast the seed using about 50 pounds to the acre and drag or rake the planted area to cover seed.

Price \$16.00 per 100 pounds.



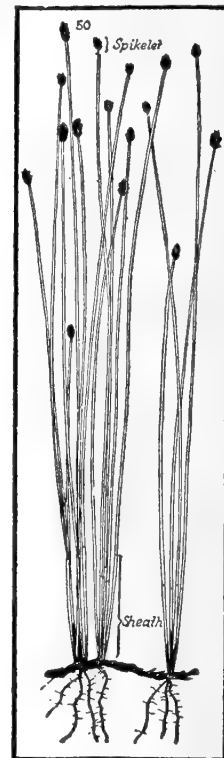
Duck Wheat  
(*Fagopyrum Tataricum*)

## SPIKERUSH

(*Eleocharis*)

This is a very hardy species of rush that produces seeds at the top of each stem that the wild ducks are fond of. Wild geese also feed upon this plant. Its slender round stems are from 2 to 3 feet in height, making cover as well as food. The long running roots will produce plants every few inches, in either sand or fertile soils. Fresh, alkaline or salt waters will grow Spikerush in any climate from Hudson Bay to Panama. For best results, set the rootstocks at the water's edge for they will grow and reproduce on either wet soils or to one foot of water. One bushel starts a half acre bed.

Price: Spikerush Rootstocks  
\$20.00 per bushel



Spikerush



## WIGEON-GRASS

Redheads, Bluebills, Wigeon and Canvasbacks feed upon the roots, seeds and leaves of Wigeon-Grass. It is considered the best wild duck attraction for brackish waters. Mallards and other marsh ducks feed upon Wigeon-Grass during low tide where it grows in bays and streams which are affected by tides.

### WHEN AND WHERE TO PLANT

Wigeon-Grass Plants are transplanted during Fall or Spring in brackish waters. It grows in salt water but never in that of full ocean strength. It thrives in waters affected by ocean tides. This plant grows in waters from 1 to 10 feet in depth on a mud bottom.



Wigeon-Grass  
(*Ruppia Maritima*)

### HOW TO PLANT

The Wigeon-Grass Plants are planted by simply pushing the roots of the plant down into the mud with an oar or paddle in one to six feet of water. Three bushels of plants to the acre.

### PRICE

Wigeon-Grass Plants  
\$10.00 per bushel.

## SALICORNIA

### For Tide Waters (Salt)

A real salt water duck food. Due to the glassy appearance of the stems it is called Glasswort. The plants are leafless but have numerous joints off the stems. Glasswort also thrives in strong alkaline waters. It produces abundantly of seed which the wild ducks are very fond of. Mallard, Blackducks and Sprig in particular like it, but all species of wild ducks eat it.

Salicornia or Glasswort may be planted during April to November by placing the plants in the soil in the desired place. It grows well on any fairly good soil, places exposed at low tide and covered at high tide, or very shallow alkaline waters. Three bushels will plant one acre, an acre will provide an abundance of duck food and spread to other suitable nearby places. Plant several small beds.

This plant has long been known as a good duck food, but until now has not been on the market or available for replanting.

Salicornia Plants \$10.00 per bushel.

## Aquatic Plants and Percentage of Each Eaten by the Best Known Wild Waterfowl

This list compiled by us from data obtained from bulletins published by the U. S. Department of Agriculture, Bureau of Biological Survey, Washington, combined with knowledge gained by the examination of the contents of stomachs of wild waterfowl, taken from different sections of U. S. and Canada.

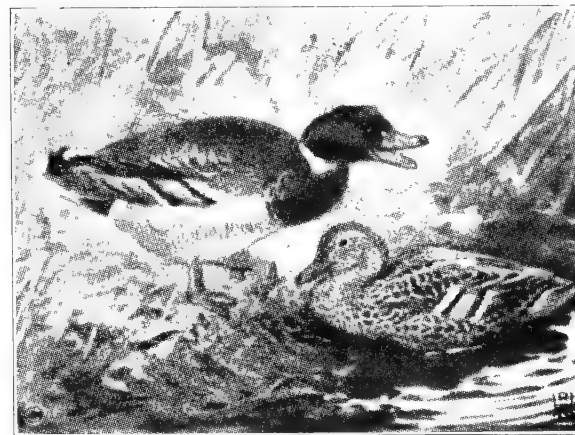
MALLARD	PINTAIL	BLUEBILL	REDHEAD	TEAL Blue-Winged
10% of Food Animal 90% of Food Vegetation	Known as Sprig 13% of Food Animal 87% of Food Vegetation	15% of Food Animal 85% of Food Vegetation	14% of Food Animal 86% of Food Vegetation	27% of Food Animal 73% of Food Vegetation
22% Sedges Cyperus Rushes Burreed Chufa Wampee Grasses	28% Pondweeds Brownleaf Redhead Grass Sago Pond Plant Eel Grass Wigeongrass Naiaas	31% Wild Celery 15% Pondweeds Sago Pond Plant Naiaas Redhead Grass Brownleaf Eel Grass Wigeongrass	30% Wild Celery 17% Pondweeds Sago Pond Plant Naiaas Redhead Grass Brownleaf Eel Grass Wigeongrass	22% Sedges Cyperus Rushes Chufa Wampee 16% Pondweeds Sago Pond Plant Naiaas
14% Wild Rice Wild Millet	22% Sedges Bulrush Three Square Rush Chufa Wampee Grasses	9% Muskgrass 7% Wapato and Delta Duck Potato	9% Wapato and Delta Duck Potato 5% Duckweeds 5% Muskgrass 6% Grasses	Redhead Grass Brownleaf Eel Grass Wigeongrass 14% Grasses
9% Smartweeds Duck Wheat Pondweeds Sago Pond Plant Naiaas Redhead Grass Brownleaf Eel Grass Wigeongrass	11% Wild Rice Wild Millet 7% Smartweeds Duck Wheat 5% Muskgrass 4% Delta and Wapato Duck Potato	4% Grasses Wild Rice Wild Millet 4% Sedges Cyperus Rushes Burreed Chufa Wampee 2% Waterlily Banana " Yellow "	6% Sedges Cyperus Rushes Burreed Wampee 4% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 1% Coontail 16% Unidentified and Miscellaneous	2% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 1% Burreed 4% Unidentified and Miscellaneous
6% Duckweeds Duck Meat 6% Coontail 5% Wild Celery 4% Hackberries 4% Wapato and Delta Duck Potatoes 3% Acorns 4% Waterlily Banana " Yellow " American Lotus 3% Water Milfoil 1% Muskgrass	3% Waterlily Banana " Yellow " Wokas American Lotus 1% Duckweeds 1% Milfoil 1% Wild Celery 4% Unidentified and Miscellaneous	4% Grasses Wild Rice Wild Millet 4% Sedges Cyperus Rushes Burreed Chufa Wampee 2% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 3% Unidentified and Miscellaneous	6% Sedges Cyperus Rushes Burreed Wampee 4% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 1% Coontail 16% Unidentified and Miscellaneous	2% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 1% Burreed 4% Unidentified and Miscellaneous

CONTINUED FROM PAGE 30—

This is the average percentage of goods covering a large territory and wide range of growing conditions, which may vary in different localities where some plants grow more abundantly than others.

BLACK DUCK	CANADA GEESE	CANVASBACK
24% of Food Animal 76% of Food Vegetation	3% of Food Animal 97% of Food Vegetation	8% of Food Animal 92% of Food Vegetation
33% Pondweeds Sago Pond Plant Naias Redhead Grass Brownleaf Eel Grass Wigeongrass 11% Grasses Wild Rice Wild Millet 9% Sedges Bulrush Burreed Cyperus 6% Smartweeds Duck Wheat 5% Waterlily Banana " Yellow " Wokas American Lotus 2% Coontail 4% Wapato and Delta Duck Potato 3% Wild Celery 1% Muskgrass 2% Miscellaneous	29% Grasses Wild Rice Wild Millet 24% Sedges Cyperus Rushes Burreed Chufa 12% Wapato Some Delta 8% Smartweeds Goose Buckwheat 5% Wild Celery 4% Pondweeds Sago Pond Plant Naias Redhead Grass Brownleaf Eel Grass Wigeongrass 2% Coontail 1% Water Milfoil 1% Wampee 11% Elodea 8% Upland Plants and Grains 2% Miscellaneous	38% Wild Celery 18% Pondweeds Sago Pond Plant Naias Redhead Grass Brownleaf Eel Grass Wigeongrass 8% Wapato and Delta Duck Potato 6% Waterlily Banana " Yellow " American Lotus 6% Muskgrass 5% Grasses Wild Rice Wild Millet 5% Sedges Cyperus Rushes Wampee 1% Coontail 1% Water Milfoil 1% Duckweeds 3% Unidentified and Miscellaneous

## MORE FOOD— MORE DUCKS— BETTER SHOOTING OVER THE ENTIRE SEASON



Mallard (*Anas Platyrhyncha*)

## How To Get More Ducks

If the late Jack Miner, with nothing but a brick yard pond, a few live decoys, plenty of food and a lot of perseverance can bring thousands of geese from all points of the compass, surely you can materially increase the waterfowl supply on your waters.

Because a place is not in the beaten path of the large regular waterfowl flyways is no excuse for hesitancy. Mr. Miner's experience shows that the ducks and geese will go many miles out of their way to get a good meal at a cafeteria that is properly safeguarded against intruders.

Many Sportsmen are planting duck foods in suitable waters, and the results are good. If you want more ducks you must also get busy and do some duck food planting.

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Don't cheat. The man who illegally takes game or fish robs his fellow man and defrauds his state. He robs posterity of its rightful heritage. It is the duty of every citizen to report violations of fish and game laws and to endeavor to cause the erring brother to see the error of his ways.



## *Aquatic Plants in Relation to Game Fish*

By WILLIAM O. COON, Naturalist

Many of the same plants which are important food plants for waterfowl are also important food and cover plants for game fish. Therefore, one will improve both hunting and fishing by establishing a growth of aquatic vegetation in that lake, pond or stream.

The number of game fish that can live in any body of water is dependent upon the nature of the living conditions that exist

within those waters. Also the size of those game fish is governed by those water conditions.

Aquatic plant life in a body of water is equally as important to fish life as the vegetation that grows upon the upland is to the animal life that lives in the woods or fields.

The basis of all food for every living creature is plant life. From the human being to the lowest form of animal life are dependent upon vegetation for their existence. Even though one species is carnivorous and may feed upon another carnivorous creature, somewhere down the line there are those that are dependent upon vegetation.

Game fish within most lakes are imprisoned within those waters. It is the plant life that grows within those waters that create the proper balance for their living condition. The advantages of that vegetation are many. A sportsman may curse and condemn the weeds—that entangle his fish line or snag his lure, but without those weeds the fish cannot grow to a healthy pan size for eating or give that sportsman the thrill he gets in catching him.



*"There!  
Right by  
that lily  
pad,"*

*-ZOWIE!-  
"What a  
Whopper!"  
"That's  
where they  
lay!"*

Whether it be fish life, bird or animal life—there are but three fundamentals that concern them. First is to obtain food; the second is protection from their natural enemies; and the third to reproduce. Let's just touch on the basic facts concerning each of these.

### FOOD FOR GAME FISH

All fishes classified as game fish are carnivorous creatures (meat eaters), some of them are cannibalistic and feed upon the smaller of their own kind. Many game fishes feed upon other species of game fishes, rough fish and otherwise. There are certain species of small fishes that never grow large and which multiply rapidly that are known as forage fish.

It takes an abundance of small fish to provide food for large numbers of larger fish, and, therefore, to have an abundance of small fish they likewise must have a greater abundance of food.

These smaller species of fish are dependent for their food upon the microscopic animal life that lives in the waters. One drop of water may contain numbers of small creatures visible only when placed under a microscope. They are not harmful to man or beast, but are important to those fish. This small animal life may, depending upon the species, be dependent upon the living plants that grow in those waters or the decaying foliage and roots of old dead vegetation. Perhaps this small microscopic creature



A case where eyes are bigger than stomach.

—Courtesy Field and Stream.

may also be carnivorous and feed upon other smaller species of tiny creatures, but somewhere down this line if traced to its source, the plant life provides that food that enables one to live upon the other.

### PROTECTION

Here we will consider protection for these fishes from their natural enemies. The parent fish takes its young into the weed bed, not only because food is more abundant there, but because it affords hiding places among the dense growth. A bird takes its young into the brush, vines or trees; a deer seeks the dense forest; a mountain creature a cave beneath a lofty cliff; the ground creature in its burrow. Fishes depend upon aquatic vegetation, dead branches or tree trunks, over-hanging banks and beneath the edges of rocks, depending largely upon the species, but plant life affords the most ideal place.

There are many other advantages to a proper balance of aquatic vegetation in those waters aside from food and cover for game fish. These are truly important but too numerous to explain about all of them. However, may we touch on a few of those which are most important:

You have heard of people being locked in a vault and dying from suffocation, due to using all of the oxygen from the small space of air therein. You know that people cannot exist in the absence of oxygen, neither can any creature with blood in its veins. Surely you know that when your lungs take the oxygen from the air, that it's the vegetation upon

the earth that lives upon this used air and puts back into it that oxygen so essential to our existence. Plant life in the water does exactly the same for those game fish imprisoned therein. Should there exist a shortage of oxygen, the tiny fish will perish first, the same as a babe could not exist as long as a healthy adult. Should a million of these fish die in your lake, you would be unaware of it. The tiny creatures would be consumed by the bird life along the shores, and were they not, you could not locate them without a microscope or if you knew exactly what to look for.

While game fish have no lungs, they do have blood and require oxygen. They take the oxygen directly into the blood stream through the tender tissues of the gills. This oxygen is most abundant among the vegetation, that is a second reason why that the adult fish takes its young there to live.

Plant life aids in the purification of the waters. It takes up the poisonous carbon dioxide gases given off by the decomposing bottom soils. At the same time this aquatic vegetation aids in the clarification of the waters. It collects the floating particles of sediment washed from the surrounding highlands. One seldom ever sees a weedy lake with other than clear waters which are best for fish life. Lakes barren of vegetation are often roiled by turbid waters. Game fish in muddy waters often acquire a muddy taste.

Time and space will not permit us to go further

into this subject. Let us now consider the third and last fundamental concern of these wild creatures—

## REPRODUCTION

Provide a suitable living quarters with plenty of food, and they alone will take care of the reproduction.

Game fish do select a mate each year, some make a bed and lay their spawn. Let's consider the Large Mouth Black Bass, a hardy and game fellow. After mating, the female will fan the bottom, either to firm clean soil or a net-work of aquatic roots. Here she deposits her eggs and in the meantime, the male guards and protects her. Now the male takes charge of the bed and fertilizes the eggs and guards them until the small fry are hatched. Each bed may contain from 2,000 to 200,000 eggs. When the fry are hatched, the male protects them and takes them into a weed bed where food is plentiful, hiding places abundant, and oxygen sufficient. After caring for them a few days, he again is overcome with that cannibalistic instinct and may turn on the very fish he has been protecting. The fear of fish then causes him to leave the shallow water weed bed and move to the outer edges near open water where he can more readily observe the approach of his enemy. Here he lives on through the summer and fall awaiting for the smaller fish that venture into the open that he may feed upon them, but still near cover

where he may hide as well as find the shade protecting him from the sun.

That's the place to drop your lure for the big fellows at the edge of the weed bed. Lay that plug on a lily pad and with a little flip of the rod, make it jump into the water and keep it moving with a life-like action. You will get him and he will give you a thrill. Each big one you take gives more smaller fish a chance to grow to maturity.

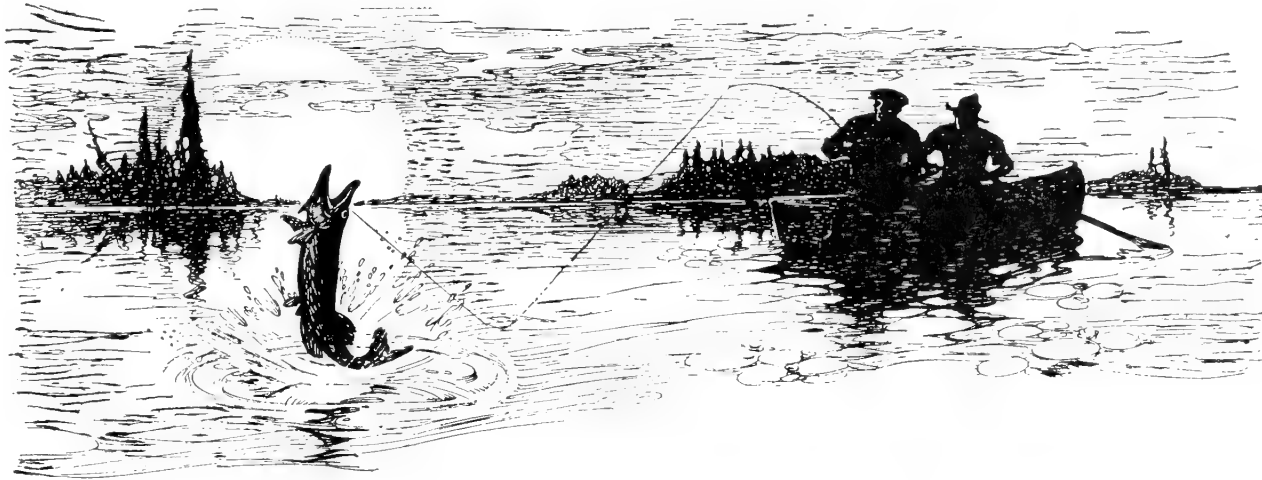
## Plants Important to Game Fish

In the pages of this booklet as indicated here will be found description of the following species of plants that are important to game fish. What, when, where and how to plant them, also prices are given after the description of each plant. Here are those plants important to game fish.

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**THIS IS THE LIFE** —What a thrill to catch these big ones. Try your hand on this rod and lay the lure right at the edge of that weed bed.



## *Worthless Marsh Made Attractive to Wild Ducks and Muskrats*



Right here in Wisconsin, within a hundred miles of Chicago, lay a piece of worthless marsh for many years. This marsh area was sort of triangular in shape, bordered on one side by a highway, on another by a hilly

pasture and on the third side by a lake. It was impossible to drain the marsh and make pasture land, for the lake level could not be controlled. The marsh was too low for pasture land and too high for trapping ground, therefore it was considered useless.

This marsh had a couple of potholes, which a local plumber used for duck shooting. The potholes were small and a few shots in the early morning would drive out the ducks. Then his day's sport would be over, and back to his plumbing work he would go.

However, this man liked the quiet of the marsh, broken only by the occasional call of a wild duck or

a rice hen or splashing of the semi-webbed feet of a coot trying to make his way over the very shallow waters.

One morning in late October, as he sat in his blind hoping to get a shot or two at some curious wild ducks that might swing over in search of food, the thought occurred to him that he could build a dike across the lake side of this marsh and control the water level inside the marsh. An artesian well could be driven to flood the area or a water conveyor could be built to lift the lake water into the marsh. What a swell idea: He could have shooting all over the marsh then.

First he had to buy the marsh. It covered two hundred acres. Upon talking to the farmer, he had little difficulty in making a deal. As a matter of fact, the farmer thought he sure had a sucker, for the marsh was no good at all. He sold it at a very reasonable price.

Now the plumber had a marsh. The next thing was to build a dike. During the following winter months he built himself a ditch digger, a simple home made contraption, run by an old automobile engine. While the marsh was still frozen over, he started to dig his dirt for the dike. The digging started about twenty-five feet in from the lake's edge—his ditch on the inside and the dike toward the lake. It ran from the highway to the hill. Finally

his marsh was enclosed. Next he dug a ditch connecting the potholes with the perimeter ditch, throwing the dirt on either side.

During the spring he planted his dredge banks with wild millet to bind the soil and also make food for the teal and mallards. Throughout that summer the banks settled and became solid and firm.

The next job was to get the water to flood his marsh. So he drove a pipe for a six-inch artesian flow. Only thirty feet into his marsh, but not enough to flood the area as he desired. However, it was sufficient to offset seepage and evaporation.

Now to get water out of the lake. To do this he had to dig a ditch from the lake to the dike, then build a water conveyor to lift water over the dike into the marsh.

His conveyor was a crude arrangement, a wooden trough six feet long and one foot deep, extending from two feet beneath the water over the top of the dike. Into this was built a chain conveyor with boards about three feet apart, that caught the water and pushed it up the trough over the dike. This was run by his same auto engine that dug the ditch for the dike. It worked very well.

Another duck season was now at hand and talk about ducks—every duck hunter for fifty miles envied him! The marsh was full of lowland weeds laden with seeds when he turned on the water. Maybe you think the ducks didn't go for those seeds. It was like baiting with corn in the old days. Well, sir, "It was so good that the local banker, the doctor, the lawyer and seven other businessmen leased the

duck shooting rights for the next five years at \$1,000 per year, and wrote into the lease that he himself and one friend could also shoot there any time during the open season, free of charge, he to retain all fishing and trapping rights."

This plumber knew that for this good shooting to continue he must do something to keep up the supply of food for those ducks. So he started to plant his marsh with natural foods. Around the banks he sowed smartweed and wild millet seeds. In the shallow waters he planted wild rice, and wapato duck potato, burreed, pickerel plants, wampee duck corn seed, water smartweed, and others. Some he bought and some he took from their natural state in nearby marshes. In the potholes and ditches he planted wild celery, sago pondweed, deep water duck potato, and other kinds. The waters were good, the soil rich, and "wow," what results.

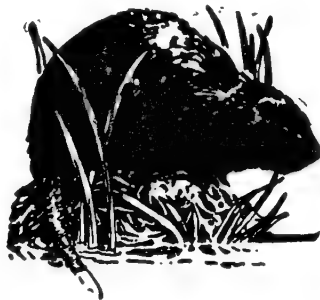
During the summer he caught bass out in the big lake and kept them in his live box, and then turned them free in the potholes in his marsh.

In the fall another problem came up. The muskrats invaded his marsh. It kept him busy patching the dikes. I believe his place actually coaxed in about half of the muskrats from the big lake. There were so many that he had to buy windfall apples, carrots, and undersize potatoes and scatter them over the marsh to keep them from eating up the duck food he had planted previously.

Finally, after the fall duck season was nearly over, he started to trap the muskrats. Their pelts were  
(continued next page)

(continued from preceding page)

now prime. Talk about a surprised man. He kept on trapping and every day his traps were full, it took him half the night to skin, clean, and stretch the furs. At the end of the season his figures added up to 2,800 muskrat pelts that brought in the handsome sum of \$5,100. This, plus his \$1,000, was not so bad an income off a worthless marsh, and he was his own boss, doing the thing he liked.



## Natural Muskrat Foods

Listed here are the aquatic plants important as Muskrat Foods, all of which are listed with prices and description of growth and water conditions required, in this booklet.

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Wild Rice .....	6	Redhead Grass .....	23
Wild Celery .....	8	Sweet Flag .....	24
Sago Pondweed .....	10	Water Iris .....	24
Hard Stem Bulrush .....	15	Pickereel Plant .....	25
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Water Shield .....	23	Cord Grass .....	27

## MUSKRAT FARMING

Man has been engaged in the trapping of fur-bearing animals since the early ages. The women of the stone age wore furs as clothing, the modern women wear furs, not alone because of the warmth, but for the beauty and their personal adornment. Trappers, spurred by high prices, have ruthlessly depleted the wild supply. The drainage and reclamation of swamp lands have destroyed the breeding grounds of millions of muskrats. So, if we are to have a dependable supply of fur, they must be raised. Statistics compiled by Frank G. Ashbrock of the U. S. Biological Survey, show that the muskrat is the most important of all fur bearers. More than fifty per cent of all fur used today is muskrat. His glossy pelt is not only used in its natural state, but when dyed is sold as Hudson seal, river mink, southern beaver, neutria, otter, sable and many other popular furs. For the past few years the demand for muskrat pelts has exceeded the supply by from fifteen to twenty million pelts. The result of this demand has prompted the commercial raising of this little fur bearer, by some of our largest manufacturing furriers and far-sighted individuals. Muskrat farming is a business, the same as banking, manufacturing or mining. It is as practical as the raising of sheep, cattle or hogs, the difference being that it is ten times as profitable.

To successfully raise muskrats one must have a marsh with a uniform water level. The depth of the water and musk, or floating bog, must be sufficient so that it will not freeze to the bottom in the most severe winter, the result of which would be cutting off of the food supply and the starvation of the animals. The swamp lands must abound in the natural foods of the muskrat, such as cat-tails, burreed, bulrushes, duck millet, three-blade grass, wild rice, wapato and wild celery. The location must also have high dry ground surrounding the swamp.

If a muskrat farm is ideally located and well planted with natural foods, it is bound to be a money-maker. It is a never-failing crop, unaffected by hot, cold, wet or dry weather.

Muskrats are hardy and immune from diseases. They multiply rapidly, being the most prolific of fur bearers. U. S. Government Bulletin 869 states that from actual observation one female produced thirty-three young in one breeding season. An interesting experiment has recently been concluded in Manitoba. A pair of muskrats were put into a pen and in nine months they and their progeny increased to the astounding total of 138.

It has conclusively been proved that the young female born in the Spring will produce the same Fall. We have had increases of a second litter in the Fall from a female born in the Spring; this, however, is unusual. The next Spring she has the average litter, which is eight or ten young.

—Courtesy American Field.

## WHAT OTHERS SAY—

Fresno, California  
August 30, 1946

Wm. O. Coon  
Game Food Nurseries,  
Oshkosh, Wisconsin  
Dear Mr. Coon:

I have returned from my vacation, and you may ship the remainder of my order.

I was out to my place on the 30th of July and I can tell you that I never saw any plant grow and spread so rapidly as the Wigeon Grass which we planted just a short time previous to that date. The growth of this under water plant was simply amazing and it will supply food for hundreds of ducks this Fall.

Sincerely,  
RALPH WOODWARD

---

Los Angeles 11, California  
April 16, 1946

Mr. Wm. O. Coon,  
Game Food Nurseries,  
Oshkosh, Wisconsin  
Dear Mr. Coon:

Many thanks for your letter dated April 9, and may I take this opportunity to tell you that it is a pleasure to do business with you.

Before I started dealing with you, I was dealing with another company in the same business and was very much dissatisfied with their service. I am convinced that you know so much more about this wild bird food business than anyone else I have ever dealt with, that not only will I be very happy to give you all my own business, but to recommend you to others who are looking for good material and expert advice.

JOHN GRANT

Polk, Ohio  
November 1, 1945

Mr. Wm. O. Coon  
Oshkosh, Wisconsin

Dear Mr. Coon:

Perhaps I should tell you that after all our stand of Wild Rice was wonderful this year, and at one time we counted some 125 Teal ducks which had gathered there.

We were highly pleased with the results.

(Signed) C. H. Spencer

Ravenna, Kentucky  
April 3, 1944

Game Food Nurseries,  
Oshkosh, Wisconsin

Gentlemen:

We are in the market for additional seeds.

We delivered what we purchased last year to various members of the Fish & Game Club and they were so enthusiastic about results they want more this year.

A. B. SMITH

Pinceton, Illinois  
April 5, 1946

Mr. William O. Coon,  
Oshkosh, Wisconsin

My dear Mr. Coon:

About a year ago I bought some wild rice for my small lake and last Fall the water got very low, and I would like to know if the seed that fell to the ground would stand the freeze, and grow this spring, or if not I wish that you would send me ten dollars worth of the seed, the seed I got from you last year came up just fine and I had a wonderful stand, but I do want to have some more this summer, so what you think is best to do, please do so.

Yours truly,  
C. O. RYBERG



Minatare, Nebraska  
July 28, 1943

Mr. Coon,  
Oshkosh, Wisconsin  
Dear Mr. Coon:

The water seeds and plants which I bought from you in the past are now in the stage of real growth.

I thought that perhaps you would be interested in the results that I am getting out here in this part of the country and it might help you to determine just what is best for this region, providing some one else ever asked you.

The Wapato Duck Potatoes I planted this spring are now in bloom and have a very nice field of them. The white water-lilies are beautiful and are an asset to any lake. The bulrushes are dandy. Muskgrass and Ducksmear are far beyond expectation. The wild rice is now very nice, but I think that I didn't plant enough of it.

ROBERT BASTRON

## Testimonial Letters

Mr. Wm. O. Coon  
Oshkosh, Wis.  
Dear Sir:

The shipment of Wild Celery, Wapato Duck Potato etc., your order number 5352 arrived in excellent condition.

More compliments are due you. It is so unusual and so gratifying to deal with a firm who is so prompt in handling their correspondence. A firm, also, who gives more for the money received, rather than less.

The plants, tubes and seeds received surpassed our expectations. It would be impossible to speak too highly of your firm and of the aquatic plants which you ship.

Berkshire-Michiewicz, Inc.  
(Signed) Ruth Berkshire

Sullivan, Wisconsin  
June 11, 1946

Dear Mr. Coon:

Thanks for the additional planting materials which you sent me, you sure want me to get results.

The Ducksmeat, Burreed and Smartweed Plants arrived in wonderful shape, I never saw better plants.

Thanks for your fine cooperation.

RAY A. BUSKE

Burlington, Vermont  
May 18, 1946

My dear Mr. Coon:

Received my last order in very good condition and planted them the next day.

Enclosed you will find a check for 500 Sago Pondweed Tubers ready to plant and 500 Wild Celery Tubers ready to plant.

Your last shipment looked so fresh and sturdy I couldn't help but send in another order as I want to be sure of some good duck shooting this Fall.

CHARLES MacANDREW

Huntsville, Alabama  
March 21, 1946

Mr. W. O. Coon, Naturalist  
Game Food Nurseries,  
Oshkosh, Wisconsin

Dear Mr. Coon:

Last summer we planted 12 to 14 acres of your wild millet seed on our preserve and the results were a startling success. The ducks came in by the hundreds and we had a wonderful season.

The increase was certainly ten fold. We had planned to follow the millet with smartweed this spring, but the millet was such a success that we are now thinking of replanting this same area with millet rather than take a chance with the smartweed.

EDGAR DAVIS



St. Paul, Minnesota  
September 25, 1944

Game Food Nurseries,  
Oshkosh, Wisconsin  
Dear Sirs:

Just want to let you know that the order of Wild Rice we received from you last October sure did start a wonderful crop. Most of it six to eight feet high. The club is very well pleased and will always remember your nurseries when in need of game food.

CARL D. GASTINEAU



Sanborn, Iowa  
February 16, 1946

Game Food Nurseries,  
P.O. Box 371  
Oshkosh, Wisconsin  
Gentlemen:

One year ago we ordered some duck foods from you and now would like to have some more and wish you would send price list, etc., that we may order some more for spring planting.

From what we can gather we had good luck with this food and had the best shooting that we had ever had there so wish to order more and in a larger amount.

Yours very truly,  
J. W. CRAVENS

## More Satisfied Customers

Crannell, California  
March 18, 1946

Mr. William O. Coon,  
Game Food Nurseries,  
Oshkosh, Wisconsin

Dear Mr. Coon:

We drove up to the Lake yesterday to inspect our job of planting. The rice has sprouts from one inch to five inches and the tubers have sprouted and are coming through the mud about an inch. I am sorry that we are so unfamiliar with the other seeds, etc., to know what is happening to them, but I am sure that they are doing all right. We sure are more than pleased with the results, thanks to you.

Very truly yours,  
SAM B. MERRYMAN

Spokane, Washington  
February 17, 1944

Mr. William O. Coon,  
Game Food Nurseries,  
Oshkosh, Wisconsin

Dear Mr. Coon:

You may recall that you furnished us last spring with four thousand Sago Pondweed Tubers prepared for planting with rubber bands and nails attached. We had practically a 100% result from this planting.

We planted about half of them in a pothole which the ducks had always deserted after the opening day for the lakes on the property, and this year the ducks kept coming back to the pothole week after week, obviously on account of the feed.

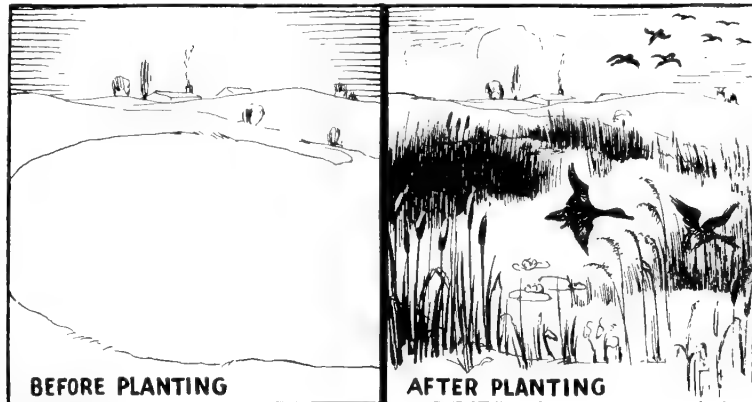
Very truly yours,  
W. W. CLARKE



## PROFESSIONAL SERVICE

# We Plan---Plant and Make Your Marshes, Ponds or Streams Attractive

The best method of procedure in developing an attractive feeding ground for either waterfowl, fish, or game is to employ the services of our expert to come and make a personal examination of the property and supervise the planting thereof. We will examine the soils, test the waters, identify the botanical growth, determine what will



grow and where to plant it to make a paradise for game or fish. Where Leagues or Associations plan to develop several lakes or properties, Clubs or private individuals controlling large areas wish to make plantings to the extent of \$600 or more we recommend this service for best and quickest results.

Perhaps you now have some natural foods growing in your waters or about the shores unbeknown to you, this service will eliminate the danger of duplicating in planting. It will insure the planting of the proper plants adapted to those particular water or soil conditions. Experimental planting on a large scale is often very costly. One experienced in planting these materials can often make the same quantity cover twice the area, with better results than the inexperienced. Proper planting is very important, it is the hinge upon which good results hang.

By having this service you will learn what grows there, its value, what we recommend planting, quantity, price and where as well as when to plant. During spring we are able to make investigations of properties and waters and supervise the planting work in one trip by telegraphing for materials after survey is completed and awaiting their express arrival.

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We often have several such contracts in a community and work from one preserve to another.

Our charge for this service is based on the size of the area and its distance from Oshkosh. When we are able to obtain several contracts in one state it enables us to quote a special low price, making this service very inexpensive. Write us for quotation on this service, we may have an expert in your vicinity now.

## TERMS

Prices listed herein effective March 1st, 1950, this list cancels all previous lists and quotations. These prices are F. O. B. Oshkosh, or other shipping points unless otherwise stated and subject to change without notice.

**QUANTITY RATES:** In lots of 250, 500 or 750 of roots, tubers or plants will be furnished at the 1000 rate; 50 of one kind will be furnished at the 100 rate.

We urge you to order early and be sure of your supply. Cash or satisfactory reference with order, if purchaser has no credit established with us. Shipments will be sent C. O. D. if so desired.

These aquatic seeds and other planting materials are perishable and must reach their destination in the shortest possible time and should be shipped by express. If you wish shipment by Parcel Post or Prepaid Express please send sufficient money to cover same otherwise we will ship charges collect.

Freight shipments can be made on dry seeds, such as Wild Millet, Smartweed and Duck Wheat.

For our reference write New American Bank, Oshkosh, Wis.; Department of Conservation, Madison, Wis.; American Fisheries Society, Washington, D. C.; American Wildlife Institute, Washington, D. C.; any outdoor sportsmen's magazine such as Field and Stream, Outdoor Life, Sports Afield, etc.; Member Chamber of Commerce; Oshkosh, Wis.



WM. O. COON, NATURALIST: ORIGINATOR  
AND OWNER, GAME FOOD NURSERIES.

**TEAR OFF HERE**

Kindly Place My Order For the Following Items.

DATE.....195..

Ship to .....

Sign Name Here

Address .....

Ship to Arrive On.....By Express ..... Parcel Post .....

Date \_\_\_\_\_

Quantity	Materials	Price
	Water Smartweed Roots	
	Hard Stem Bulrush Roots	
	Bu. Wigeongrass Plants	
	Frogbit Plants	
	Cattail Roots	
	Banana Waterlily Buds	
	Water Shield Roots	
	Pickrel Plants	
	Lb. Three-Square Rush Seed	
	Bu. Salicornia Plants	
	Lbs. Duckwheat Seed	
	Sweet Flag Roots	
	Total	
	Less Discount	
	Amount of Order	\$

Inclose Check \$..... Express C.O.D.....

## GUARANTEE

We guarantee our seeds, roots, tubers and other nursery stock to grow and produce satisfactory results. If a complete planting or any portion fail to produce what you consider a satisfactory growth after allowing a sufficient time to grow and mature, we will agree to furnish an equal quantity to that which fails at one-half the list price.

You are the judge as to whether or not your planting has proven a success. If dissatisfied with the results, tell us about it and we will replace the order at half-price, or an equal value of any other planting materials you wish to select from our list at one-half list price.

Failures with good germinating seed and hardy plants, tubers, shrubs, etc., such as we supply are few and far between. Marsh and water plants are very hardy and sure to grow.

Complete Planting Instructions Sent with Each Order

## GAME FOOD NURSERIES

P. O. BOX 371

OSHKOSH, WISCONSIN, U.S.A.

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